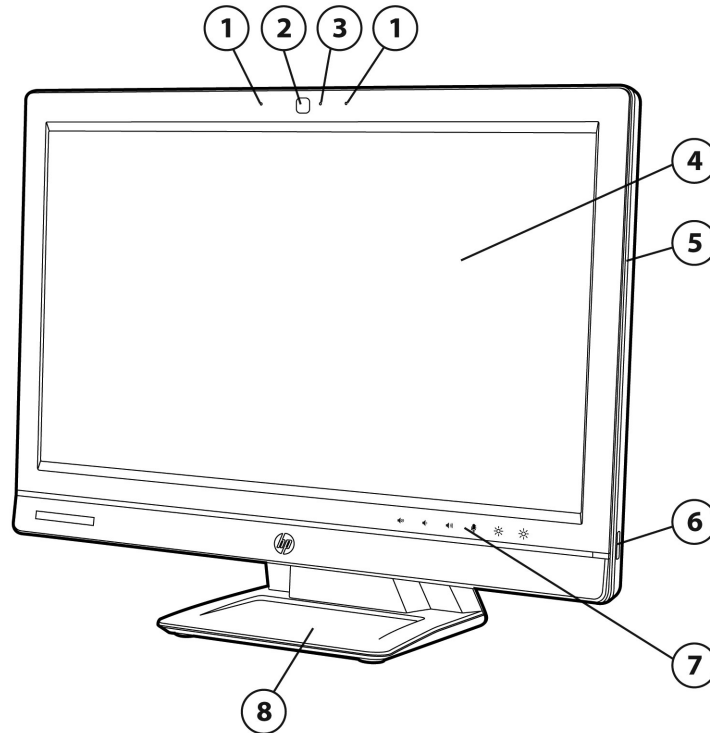


Overview

HP COMPAQ PRO 6300 ALL-IN-ONE PC

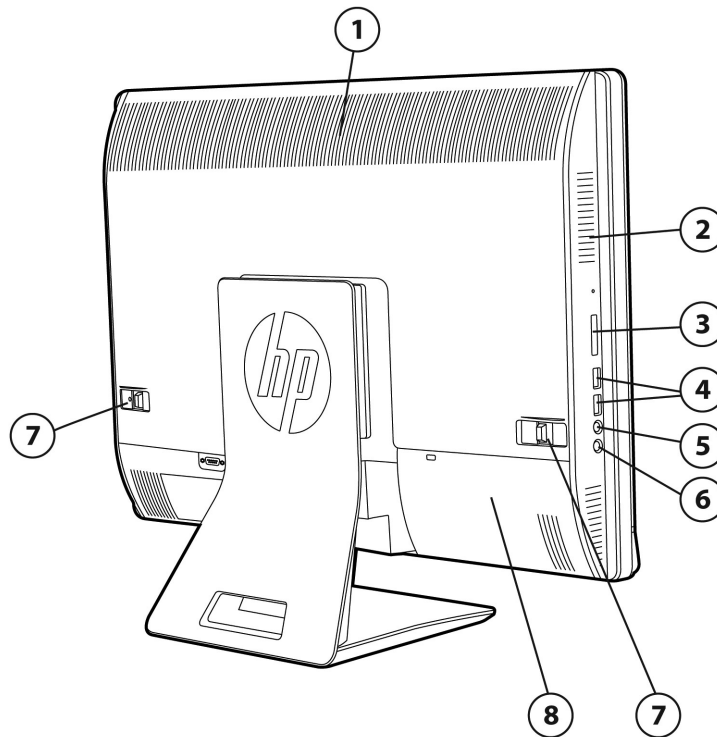


FRONT

1. Dual microphone array
2. 2.0 MP Webcam (optional)
3. Webcam Activity LED (only on models with Webcam)
4. 21-inch diagonal Full HD capable screen
5. Optical drive opening
6. Power button
7. Capacitive Controls for Brightness, Volume, Mic Mute, Speaker Mute
8. Stand (can be configured with no stand, basic stand, or height adjustable/reclining stand)

Overview

HP COMPAQ PRO 6300 ALL-IN-ONE PC

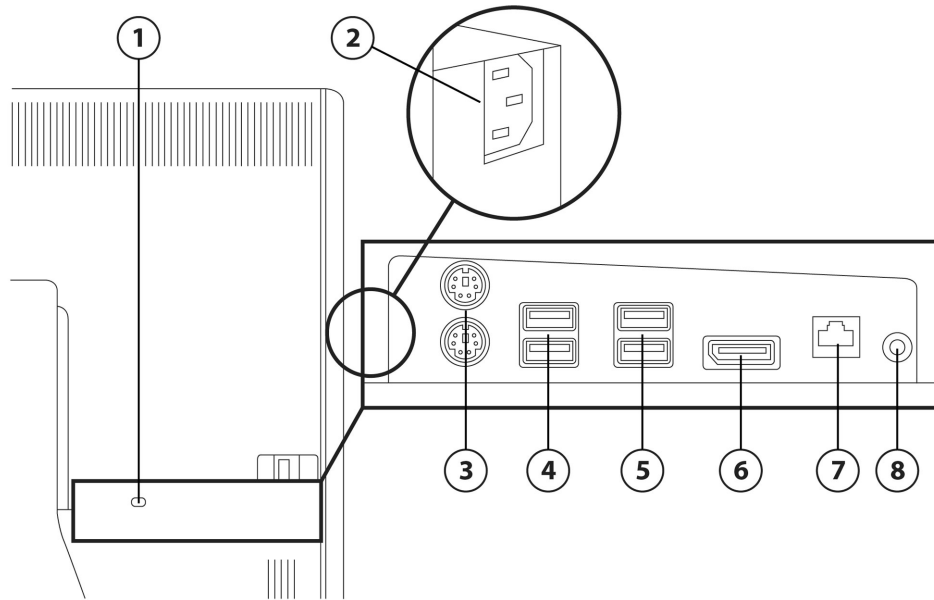


BACK

1. Vent slots
2. Side venting
3. 6-in-1 Media Card Reader (optional)
4. (2) USB 3.0 ports
5. Mic input jack
6. Headphone jack
7. Access panel latches
8. Rear port cover

Overview

HP COMPAQ PRO 6300 ALL-IN-ONE PC

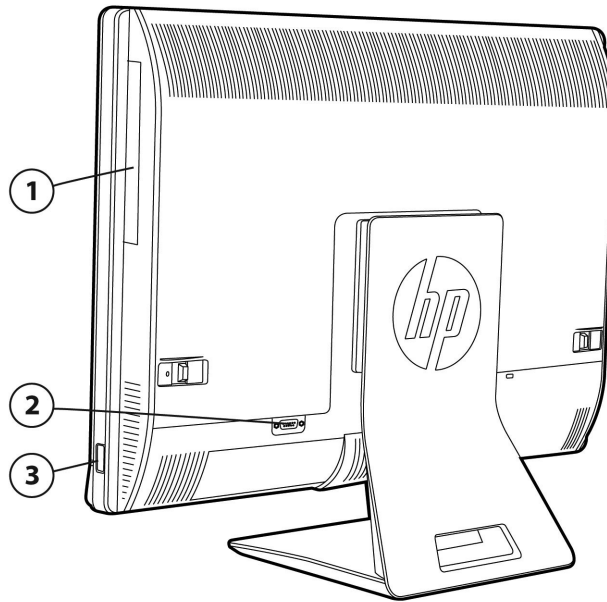


REAR PORTS (BEHIND COVER)

1. Security lock slot
2. Power connector
3. PS/2 mouse and keyboard connectors
4. (2) USB 2.0 ports
5. (2) USB 3.0 ports
6. DisplayPort connector
7. RJ-45 Gigabit Ethernet port
8. Stereo line out

Overview

HP COMPAQ PRO 6300 ALL-IN-ONE PC



SIDE

1. Slim tray-load optical drive
2. Optional serial port
3. Power button

Overview

At A Glance

- Windows® 7 Professional 32- and 64-bit
- UEFI BIOS developed and engineered by HP for better security, manageability and software image stability
- Integrated all-in-one form factor
- 21.5-inch Full HD (1920 x 1080) diagonal widescreen WLED backlit anti-glare LCD
- Landscape or portrait display orientation
- Optional height adjustable/reclining stand
- Intel® Q75 chipset
- Intel 2nd & 3rd generation Core™ processors
- Integrated Intel HD Graphics
- Optional MXM Discrete graphics
- Integrated Intel 82579LM Gigabit Network Connection
 - Optional wireless connectivity:
 - Intel Advanced-N 6205 WLAN (mini PCI Express)
 - Intel 802.11 a/b/g/n
 - WLAN (mini PCI Express)
 - HP 802.11 b/g/n
 - WLAN and Bluetooth Combo Card
 - HP 802.11 a/b/g/n
 - Bluetooth® 3.0
- WiDi support (with Intel 6205 WLAN)
- Optional Integrated 2.0 MP webcam & Dual Microphone Array
- High performance integrated stereo speakers
- Optional SRS Premium Sound™
- Up to 16 GB of DDR3 SDRAM, dual channel memory support, two SODIMM slots
- Support for up to 3 storage drives (2 SATA, 1 mSATA)
- Up to 1 TB SATA hard drive, up to 128GB solid state drive, and 256GB Self-Encrypting Solid State Drive
- Optional Slim Tray-load SuperMulti Optical Disc Drive or DVD ROM Optical Disc Drive
- Optional 6-in-1 Media Card Reader
- Optional serial port
- Display port out
- Integrated VESA 100min x 100max mounting hole
- Lockable rear access panel with intrusion sensor
- ENERGY STAR® qualified. EPEAT® registered where applicable/supported. See www.epeat.net for registration status by country.
- CCC, CECP & SEPA Certified
- Qualified for Microsoft Lync
- TCO AiO and Edge
- BFR/PVC Free
- Arsenic Free
- Protected by HP Services, including standard warranties up to 5-5-5 (terms and conditions vary by country; certain restrictions and exclusions apply)

Standard Features and Configurable Components (availability may vary by country)

OPERATING SYSTEM

Preinstalled

Windows® 7 Ultimate (32-bit)
Windows® 7 Ultimate (64-bit)
Windows® 7 Professional (32-bit)
Windows® 7 Professional (64-bit)
Windows® 7 Home Premium (32-bit)
Windows® 7 Home Premium (64-bit)
Windows® 7 Home Basic (32-bit)

FreeDOS

Certified

Novell SUSE Linux Enterprise Desktop 11

PROCESSOR

Intel® 3rd Generation Core™ i7 Processors

Intel® Core™ i7-3770S

Up to 3.9 GHz turbo boost frequency, 8 MB cache, 4 cores, 8 threads
Intel HD Graphics 4000
Supports DDR3 memory up to 1600 MT/s data rate
Intel Stable Image Platform Program (SIPP)

Intel® 3rd Generation Core™ i5 Processors

Intel® Core™ i5-3570S

Up to 3.8 GHz turbo boost frequency, 6 MB cache, 4 cores, 4 threads
Intel HD Graphics 2500
Supports DDR3 memory up to 1600 MT/s data rate
Intel Stable Image Platform Program (SIPP)

Intel® Core™ i5-3475S

Up to 3.6 GHz turbo boost frequency, 6 MB cache, 4 cores, 4 threads
Intel HD Graphics 4000
Supports DDR3 memory up to 1600 MT/s data rate
Intel Stable Image Platform Program (SIPP)

Intel® Core™ i5-3470S

Up to 3.6 GHz turbo boost frequency, 6 MB cache, 4 cores, 4 threads
Intel HD Graphics 2500
Supports DDR3 memory up to 1600 MT/s data rate
Intel Stable Image Platform Program (SIPP)

Intel® 2nd Generation Core™ i3 Processors

Intel® Core™ i3-2130

3.4 GHz base frequency, 3 MB cache, 2 cores, 4 threads
Intel HD Graphics 2000
Supports DDR3 memory up to 1333 MT/s data rate

Intel® Core™ i3-2120

3.3 GHz base frequency, 3 MB cache, 2 cores, 4 threads
Intel HD Graphics 2000
Supports DDR3 memory up to 1333 MT/s data rate

Standard Features and Configurable Components (availability may vary by country)

Intel® Pentium® Processors

Intel® Pentium® G870

3.1 GHz base frequency, 3 MB cache, 2 cores, 2 threads

Intel HD Graphics

Supports DDR3 memory up to 1333 MT/s data rate

Intel® Pentium® G860

3.0 GHz base frequency, 3 MB cache, 2 cores, 2 threads

Intel HD Graphics

Supports DDR3 memory up to 1333 MT/s data rate

Intel® Pentium® G640

2.8 GHz base frequency, 3 MB cache, 2 cores, 2 threads

Intel HD Graphics

Supports DDR3 memory up to 1066 MT/s data rate

Intel® Celeron® Processors

Intel® Celeron® G550

2.6 GHz base frequency, 2 MB cache, 2 cores, 2 threads

Intel HD Graphics

Supports DDR3 memory up to 1066 MT/s data rate

Intel® Celeron® G540

2.5 GHz base frequency, 2 MB cache, 2 cores, 2 threads

Intel HD Graphics

Supports DDR3 memory up to 1066 MT/s data rate

Intel® Celeron® G460

1.70 GHz base frequency, 1.5 MB cache, 1 core, 1 thread

Intel HD Graphics

Supports DDR3 memory up to 1066 MT/s data rate

CHIPSET

Intel® Q75

Standard Features and Configurable Components (availability may vary by country)

INTEL® STANDARD MANAGEABILITY

Includes DASH 1.0/1.1 compliance plus:

- System Defense
- Agent Presence
- SOL/IDE Redirection
- CISCO NAC/SDN support
- ME Wake on LAN
- Host Based Configuration
- ME Firmware Rollback
- IPv6 Support

DASH 1.0/1.1 compliance:

- Boot Control
- HW Inventory
- SW Inventory
- Power State Management
- HW Alerting

SMBIOS

System Management BIOS, previously known as DMI BIOS, is used to store system management information.

GRAPHICS

Integrated (*depends on processor*)

Intel HD Graphics: Basic, 2000, 2500, or 4000

Models with Intel Core i3/i5/i7 processors include HD 2000, 2500, or 4000 graphics. Models with Pentium or Celeron processors include HD graphics. Please see specific processors for graphics configuration.

Discrete (optional)

AMD Radeon HD 7650A 2GB DDR3 MXM Graphics

| | |
|-------------------------|--|
| Graphics controller | AMD Radeon HD 7650A |
| Core clock | 600MHz max |
| Memory clock | 800MHz max |
| Memory frame buffer | 2MB, DDR3, 128-bit wide |
| Memory | 2GB DDR3 |
| Supported Graphics APIs | DX11, OpenGL, full 1080p BD (H264) playback in hardware, DisplayPort 1.2 support (supports up to 4 displays total - 4 independent video and audio streams) |

NVIDIA GeForce GT 630M 2GB DDR3 MXM Graphics

| | |
|---------------------|-------------------------|
| Graphics controller | NVIDIA GF108 |
| Core clock | 675MHz |
| Memory clock | 900MHz |
| Memory frame buffer | 2MB, DDR3, 128-bit wide |

Standard Features and Configurable Components (availability may vary by country)

| | |
|-------------------------|---|
| Memory | 2GB DDR3 |
| Supported Graphics APIs | DX11, OpenGL, full 1080p BD (H264) playback in hardware |

WIRELESS DISPLAY

WiDi support with Intel Advanced-N 6205 WLAN (mini PCI Express)

Desktop system requirements for Intel Wireless Display

| System Component | Requirement |
|------------------|--|
| Processor | 3rd generation Intel® Core processor |
| Graphics | Intel® HD Graphics |
| Wireless | Intel Advanced-N 6205 WLAN (mini PCI Express) |
| Software | Intel® My WiFi Technology and Intel® Wireless Display must be pre-installed and enabled. |
| OS | Windows 7 64-bit, Home Premium, Ultimate or Professional |

DISPLAY

21.5" diagonal TN widescreen WLED backlit anti-glare LCD; orientation designed to operate in portrait or landscape

| | | |
|---------------|---|--------------------------------------|
| Display Panel | Type | TN (Twisted Nematic) LED Backlit LCD |
| | Viewable image area (horizontal & vertical) | 476.64 (H) x 268.11 (V) |
| | Screen opening (H x V) | 479.8 (H) x 271.3 (V) |
| | Resolution | 1920 x 1080 |
| | Aspect ratio | 16:9 |
| | Contrast ratio (typical) | 1000:1 |
| | Brightness (typical) | 250 nits (cd/m²) |
| | Viewing angle (typical) | 85/85/80/80 (L/R/U/D) |
| | Pixel pitch | 476.64 (H) x 268.11 (V) |
| | Backlight lamp life (to half brightness) | 30,000 hours minimum |
| | Color support | Over 16 million colors (through FRM) |
| | Color gamut (typical) | 72% |
| | Anti-glare | Yes |
| | Default color temperature | Warm (6500K) |

NOTE: All performance specifications represent the typical specifications provided by HP's component manufacturers; actual performance may vary either higher or lower.

| | |
|------------------------|-------------|
| Basic Stand Tilt Angle | -5° to +30° |
|------------------------|-------------|

Standard Features and Configurable Components (availability may vary by country)

Height Adjustable /Reclining Stand Tilt Angle

Low position sliding height adjustment => -5° to +60°
High position sliding height adjustment => -5° to +30°
Vertical adjustment=> up to 110 mm

WEBCAM & MIC

Optional integrated 2.0 MP webcam & dual microphone array; maximum resolution of 1920 x 1080

STORAGE

3.5 " SATA Hard Drive

250 GB, 7200 rpm, SATA 6.0 Gb/s, SMART IV
500 GB, 7200 rpm, SATA 6.0 Gb/s, SMART IV

2.5 " SATA Hard Drive

320 GB, 7200 rpm, SATA 6.0 Gb/s, SMART IV
500 GB, 7200 rpm, SATA 6.0 Gb/s, SMART IV

2.5" Solid State Drive

120 GB, SATA, Solid State Drive
128 GB, SATA, Solid State Drive

2.5" Self-Encrypting Solid State Drive

256 GB, SATA, Self-Encrypting Solid State Drive

Optical Disc Drive

Slim Tray-load SATA DVD-ROM
Slim Tray-load SATA SuperMulti DVD Writer
No included ODD

Media Card Reader (optional)

6-in-1 PCIe Interface
Supports Secure Digital (SD, SDHC), MultiMedia Card (MMC), xD-Picture Card, Memory Stick, Memory Stick Pro

Standard Features and Configurable Components (availability may vary by country)

MEMORY

Type

Non-ECC, DDR3 SDRAM, 1600 MT/s, SODIMM

Maximum

16 GB

of Slots

2

204-pin supporting dual-channel memory

Maximized dual-channel performance requires SODIMMs of the same size and speed in both memory slots.

NOTE: Full availability of 4 GB or more of memory requires a 64-bit operating system. With Windows 32-bit operating systems, the amount of usable memory is dependent upon your configuration, so that above 3 GB all memory may not be available due to system resource requirements.

Memory modules support data transfer rates up to 1600 MT/s; actual data rate is determined by the system's configured processor. See processor specifications for supported memory data rate.

NETWORKING/COMMUNICATIONS

Ethernet (RJ-45)

Integrated Intel 82579LM Gigabit Network Connection

NOTE: The term "10/100/1000" or "Gigabit" Ethernet indicates compliance with IEEE standard 802.3ab for Gigabit Ethernet, and does not connote actual operating speed of 1 Gb/s. For high-speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

Wireless LAN (optional)

Intel 802.11a/b/g/n wireless 6205 PCIe minicard

Up to 300 mbps data rate

HP 802.11b/g/n wireless PCIe minicard

Up to 300 mbps data rate

HP 802.11a/b/g/n wireless minicard with Bluetooth Combo

Up to 300 mbps data rate

Bluetooth 3.0 compliant

Works with a wide range of Bluetooth devices

AUDIO/MULTIMEDIA

SRS Premium Sound™ (optional)

IDT 92HD91 Audio

High performance integrated stereo speakers

Volume control and mute buttons

Stereo headphone jack

Microphone in

Stereo line out

Integrated 2.0 MP webcam (up to 30 frames/sec) & dual microphone array (optional)

Standard Features and Configurable Components (availability may vary by country)

KEYBOARDS AND POINTING DEVICES

Keyboard

| | |
|--------------------------------|---|
| HP PS/2 | 104 keys plus special functions for Mute, Volume Up, Volume Down, Sleep Separate numeric keypad Cable length 51 in (130 cm) |
| HP USB | 104 keys plus special functions for Mute, Volume Up, Volume Down, Sleep Separate numeric keypad Cable length 51 in (130 cm) |
| HP Wireless Keyboard & Mouse | 104 keys plus special functions for Mute, Volume Up, Volume Down, Sleep Separate numeric keypad; two buttons with scroll wheel acting as third button Operates at ~ 2.4 GHz and supports a working distance of up to 32 ft (10m) Cable length 6ft (1.8m) |
| HP USB CCID SmartCard Keyboard | 104, 105, 106, 107, 109 layout (depending upon country) Carbonite/Silver All ISO 7816 smart cards |
| HP USB PS/2 Washable Keyboard | SpillSeal® keyboard technology protection USB & PS/2 support in one solution Separate numeric keypad Cable length 7ft (2.2m) |

Mice

| | |
|-----------------------------------|---|
| HP PS/2 Mouse | Two buttons with scroll wheel 72.8 in (185 cm) |
| HP USB Optical Mouse | Two buttons with scroll wheel 72.8 in (185 cm) |
| HP USB 1000dpi Laser Mouse | 1000 dpi support Two buttons with scroll wheel Cable length 70.8 in (180 cm) |
| HP USB PS/2 Washable Scroll Mouse | SpillSeal® mouse technology protection Two buttons with scroll wheel 8.8 ft total 70 cm+ 2m extension |

Standard Features and Configurable Components (availability may vary by country)

HP BIOS

Key features of the HP BIOS include:

- Deployment and manageability - HP BIOS provides several technologies that help integrate the HP Compaq Pro 6300 Business PC into the enterprise, such as PXE, remote configuration, remote control, and F10 Setup support for 12 languages.
- Stability - HP BIOS supports the HP stable product roadmap by releasing only critical BIOS changes to the factory and advanced change notification.
- Support UEFI specification 2.1
- Thermal and power management - The HP BIOS provides and enables thermal and power management technologies so component temperatures are managed for high reliability and to assist in operating the HP Business Desktop computer in any enterprise environment.
- Thermal Controlled Fans - Automatic or manual controlled fan speeds for cooling and acoustic performance Serviceability - HP BIOS provides diagnostic and detailed service information.
- Upgrades and recovery - HP BIOS provides numerous ways to upgrade HP Business Desktop computers, including BIOS updates from within DOS (DOSFlash), BIOS updates from within Windows (HPQFlash), HP Client Manager, and fail-safe recovery (Emergency Boot Block Recovery). In addition, the HP Business Desktop BIOS Utilities tool enables replicated BIOS setup throughout the Enterprise; it is available from within the BIOS software and from the support website.
- HP BIOS uses PKI signing of the BIOS for trusted BIOS upgrades and recovery.

Additional HP BIOS Features:

- Power-On password - Helps prevent an unauthorized user from powering on the system.
- Administrator password - Also known as the setup password, this helps prevent unauthorized changes to the system configuration. If the administrator password is not known, the BIOS version cannot be changed and changes cannot be made to BIOS settings using F10 setup or under the OS.
- Advanced Configuration and Power Interface (ACPI) - Represents a significant innovation in power and configuration management, allowing operating systems and applications to manage power based on activity and usage. HP Elite models use ACPI to provide power conservation features.
- S5 Max Power Savings setting supports EU Lot6 requirement and allows the computer to power down below 1W in S5 (when turned off). When S5 Max Power Savings feature is enabled power to slots is turned off along with WOL functionality.
- Master Boot Record Security - Helps to prevent changes and/or infections to the Master Boot Record caused by viruses or malicious code.

SECURITY

USB port disable
HP Keyed Cable Lock (optional)
Common Criteria Certified, Infineon TPM SLB9635TT1.2 - 3.17 FW
Intrusion Detector
Lockable Access Panels
Wall Mountable via VESA bracket
Support for Nobel Locking Plate (3rd party option)
Support for 3M Privacy Screen (3rd party option)

POWER

Internal 180W, 90% efficient, active PFC
100-240V AC
HP Power Assistant software (optional)
Provides real-time reporting of how system settings impact the energy consumed by the PC and the potential savings over time.

Standard Features and Configurable Components (availability may vary by country)

SOFTWARE

Included

INCLUDED SOFTWARE COMPONENTS AND APPLICATIONS WITH WINDOWS OPERATING SYSTEM

- Adobe Flash Player
- Ask Search (alternate search engine)
- HP Marketplace
- HP Wallpaper
- Microsoft Advantage Program, including the following:
 - Bing Bar Toolbar
 - Bing Search
 - Microsoft Internet Explorer Home Page
 - Microsoft Office Starter 2010
- Microsoft Security Essentials
- PDF Complete Corporate Edition
- WinZip Basic
- Yahoo Search (alternate search engine)

INCLUDED HP DOCUMENTATION (eDOCS)

- HP eHelp Documentation
- HP Hardware Reference Guide
- HP Quick Setup & Getting Started Guide
- HP Regulatory and Safety Information
- HP Safety and Comfort Guide
- HP Warranty Documentation

INCLUDED HP SUPPORT APPLICATIONS

- HP EUDI Support Environment
- HP Help and Support
- HP Recovery Manager
- HP Setup v9.0
- HP Support Assistant

Optional

OPTIONAL SOFTWARE APPLICATIONS

HP ProtectTools Security Suite, including:

- HP ProtectTools Security Manager (w/webcam)
- Device Access Manager for HP ProtectTools
- Drive Encryption for HP ProtectTools
- File Sanitizer for HP ProtectTools
- Privacy Manager for HP ProtectTools
- HP Face Recognition for HP ProtectTools (w/webcam)

Multi-media and Audio Software Applications

- SRS Premium Sound
- Corel WinDVD 8 SD
- Roxio Creator Business 10 HD

Collaboration and Online Storage Solutions

- Box.net Online Storage (10GB) - USA only

Productivity Solutions

Standard Features and Configurable Components (availability may vary by country)

- Microsoft Office Professional 2010*
- Microsoft Office Home & Business Edition 2010*
- Microsoft Office Personal 2010 (Japan only)*
- Microsoft Windows Virtual PC - XP mode
- HP Power Assistant**
- PDF Complete Office Edition

*Microsoft Office 2010 Preloaded includes reduced functionality versions of Word and Excel. Purchase of Product Key required to activate full Office 2010 suite available at participating resellers/retailers and <http://www.office.com>.
**Provides real-time reporting of how system settings impact the energy consumed by the PC and the potential savings over time.

ENVIRONMENTAL & INDUSTRY

Energy Star® qualified models available
EPEAT® registered where applicable/supported. See www.epeat.net for registration status by country.
Industry standard certifications:
UL
CSA
FCC compliance
ENERGY STAR®
EPEAT® Gold
EUP Lot6 Tier2
CCC
CECP
SEPA
TCO AiO and Edge
Qualified for Microsoft Lync
BFR/PVC Free
Arsenic Free
[For accessibility information on HP products, please visit: http://www.hp.com/accessibility.](http://www.hp.com/accessibility)

WEIGHTS & DIMENSIONS

| Weight | Product Weight | |
|--------|--|-------------------------------|
| | <u>Basic stand</u> | |
| | 19.5 - 22.2lbs | |
| | 8.83 - 10.08 kg | |
| | <u>Height adjustable/reclining stand</u> | |
| | 31.2 - 33.9 lbs | |
| | 14.13 - 15.38 kg | |
| | <u>Without stand</u> | |
| | 14.6 - 17.4 lbs | |
| | 6.63 - 7.88 kg | |
| | Shipping Weight | |
| | Box | Pallet |
| | <u>Basic Stand</u> | <u>Basic Stand (18 units)</u> |
| | 31.09 lbs | 595.35 lbs |
| | 14.10 kg | 270 kg |

Standard Features and Configurable Components (availability may vary by country)

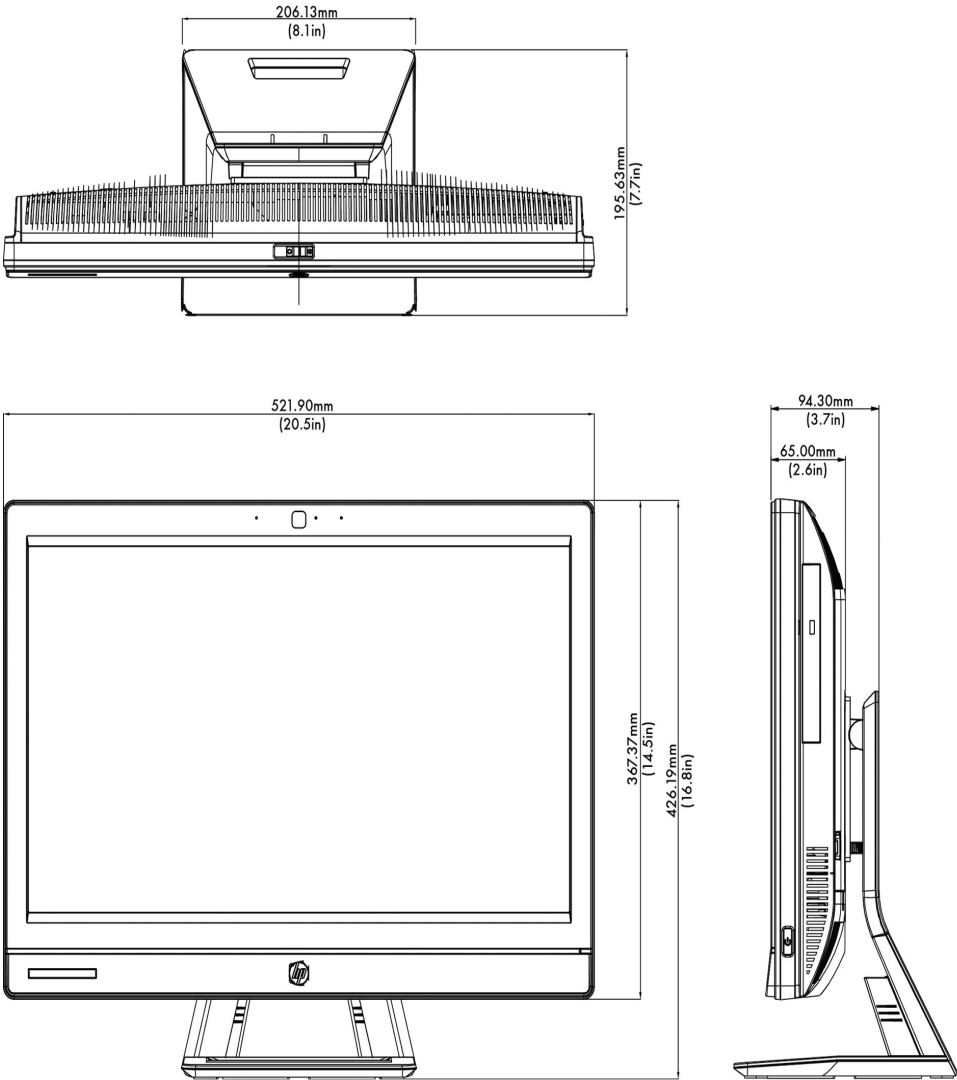
| | | |
|-----------------------------------|---|---|
| | <u>Height adjustable/reclining stand</u> 40.92 lbs 18.56 kg | <u>Height adjustable/reclining stand (12 units)</u> 491.10 lbs 222.72 kg |
| | <u>Without stand</u> 26.24 lbs 11.90 kg | <u>Without stand (18 units)</u> 503.80 lbs 228.48 kg |
| Dimensions (W x D x H) | Product Dimensions | |
| | <u>Basic stand</u> 20.5 x 7.7 x 16.8 in 521.9 x 195.6 x 426.2 mm | |
| | <u>Height adjustable/reclining stand</u> 60 degrees | <u>0 degrees</u> |
| | 20.5 x 14.4 x 10.8 in 521.9 x 365.7 x 273.4 mm | 20.5 x 9.7 x 20.4 in 521.9 x 247.5 x 518.8 mm |
| | <u>Without stand</u> 20.5 x 2.6 x 14.5 in 521.9 x 65 x 367.4 mm | |
| | Shipping Dimensions | Pallet |
| | Box | |
| | <u>Basic stand</u> 24.41 x 11.22 x 22.44 in 620 x 285 x 570 mm | <u>Basic stand (18 units)</u> 47.24 x 39.37 x 69.45in 1200 x 1000 x 1764 mm |
| | <u>Height adjustable/reclining stand</u> 28.54 x 12.95 x 20.79 in 725 x 329 x 528mm | <u>Height adjustable/reclining stand (12 units)</u> 47.24 x 39.37 x 67.09 in 1200 x 1000 x 1704mm |
| | <u>Without stand</u> 24.41 x 11.22 x 22.44 in 620 x 285 x 570 mm | <u>Without stand (18 units)</u> 47.24 x 39.37 x 72.05 in 1200 x 1000 x 1830 mm |

BASIC STAND DIMENSIONS

QuickSpecs

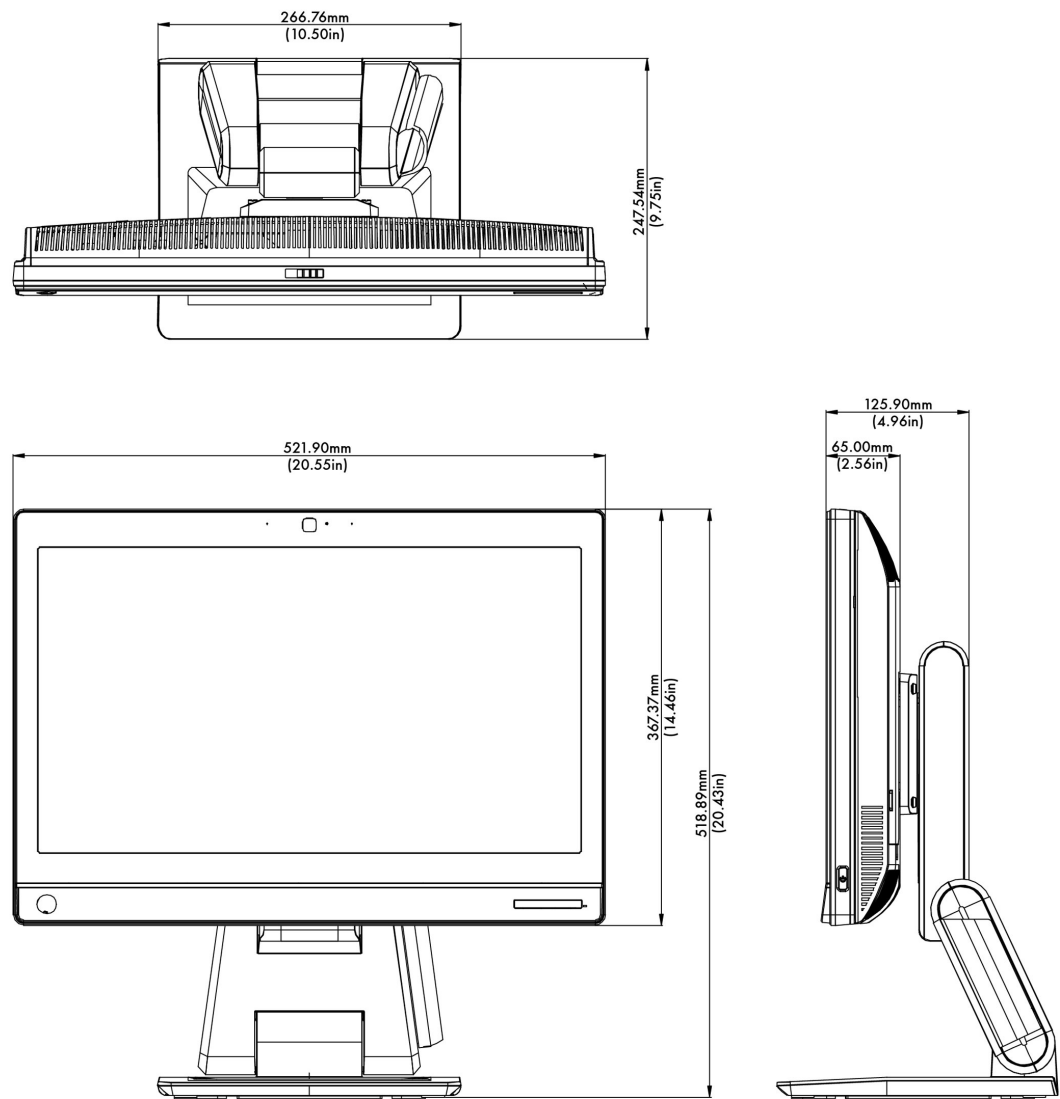
HP COMPAQ PRO 6300 ALL-IN-ONE PC

Standard Features and Configurable Components (availability may vary by country)



Standard Features and Configurable Components (availability may vary by country)

HEIGHT ADJUSTABLE/RECLINING STAND DIMENSIONS



TEMPERATURE, HUMIDITY, ALTITUDE

| | | |
|-----------------------------|---------------|--|
| Temperature | Operating | 50° to 95° F (10° to 35° C) |
| | Non-operating | -22° to 140° F (-30° to 60° C) |
| Relative humidity | Operating | 10% to 90% (non-condensing at ambient) |
| | Non-operating | 5% to 95% (non-condensing at ambient) |
| Altitude (unpressurized) | Operating | 10,000 ft (3048 m) |
| | Non-operating | 30,000 ft (9144 m) |

Standard Features and Configurable Components (availability may vary by country)

PORTS

I/O Ports - Standard

- 4 - USB 3.0 (2 side, 2 rear)
- 2 - USB 2.0 (2 rear)
- 2 - PS/2 (legacy) (one keyboard, one mouse)
- 1 - Microphone in (side)
- 1 - Headphone jack (side)
- 1 - Serial RS-232 (rear) (optional)
- 1 - Stereo audio line out (rear)
- 1 - Power connector (rear)
- 1 - RJ-45 (rear)
- 1 - 6-in-1 Media Card Reader (optional)
- 1 - DisplayPort

DisplayPort connector supports multimode technology to support connection to DVI-D, HDMI and VGA monitors with optional adapters or to a DisplayPort monitor with a DisplayPort Cable.

| | |
|------------------------------|---|
| DisplayPort Cable | Provides a direct connection between the PC's DisplayPort interface to the display's DisplayPort interface |
| DisplayPort To DVI-D Adapter | Provides a connection from the PC's DisplayPort interface to the display's DVI-D interface; adapts the DP output to the DVI-D input |
| DisplayPort To HDMI Adapter | Provides a connection from the PC's DisplayPort interface to the display's HDMI interface; adapts the DP output to the HDMI input |
| DisplayPort To VGA Adapter | Provides a connection from the PC's DisplayPort interface to the display's analog VGA interface; adapts the digital DP output to the analog VGA input |

SLOTS

- 1 - Mini PCIe half-length (used by wireless LAN module)
- 1 - SD slot(media card reader)
- 1 - MXM 3.0 Type A - 35W
- 1 - mSATA

BAYS

- 1 - 3.5" internal; Supports up to Two - 2.5" hard drives or One - 3.5" hard drive
- 1 - 5.25" external; Slim Line Optical Drive

Standard Features and Configurable Components (availability may vary by country)

SERVICE AND SUPPORT

On-site Warranty ¹: Three-year (3-3-3) limited warranty delivers three years of on-site, next business day ² service for parts and labor and includes free telephone support ³ 24 x 7. Three-year onsite and labor are not available in all countries. Service offers terms up to 5 years by choosing a Care Pack. To choose the right level of service for your HP product, visit HP Care Pack Central: www.hp.com/go/cpc

NOTE 1: Terms and conditions may vary by country. Certain restrictions and exclusions apply. Other warranty variations may be offered in your region.

NOTE 2: On-site service may be provided pursuant to a service contract between HP and an authorized HP third-party provider, and is not available in certain countries. Global service response times are based on commercially reasonable best effort and may vary by country.

NOTE 3: Technical telephone support applies only to HP-configured Compaq and third-party HP qualified hardware and software. Toll-free calling and 24 x 7 support may not be available in some countries.

Technical Specifications - Graphics

Intel HD Graphics

| | |
|-----------------------|---|
| VGA Controller | Integrated |
| DisplayPort | 1.1a; integrated, multimode capable; supports HDCP and audio over DisplayPort |
| Bus Type | PCI Express x16 |
| RAMDAC | Integrated, 350 MHz |
| Memory | Intel graphics do not have dedicated memory but utilizes some of the computer's system memory. The amount of memory used for graphics depends on the amount of system memory installed, BIOS settings, operating system, and system load. 32 MB is pre-allocated for graphics use at system boot time. Additional memory can be allocated at boot time by the BIOS for PAVP (Protected Audio Video Playback) support for playback of protected video content. |

Additional memory is allocated for graphics as needed using Intel's Dynamic Video Memory Technology (DVMT), to provide an optimal balance between graphics and system memory use.

| | |
|--------------------------------|------------------------------------|
| Maximum Graphics Memory | Microsoft Windows 7 Up to 1.7GB |
|--------------------------------|------------------------------------|

Note: the actual amount of maximum graphics memory can be less than the amounts listed above depending upon your computer's configuration.

| | |
|------------------------|-------------------------------|
| HW Video Decode | AVC/VC1/MPEG2/JPEG/MJPEG/PAVP |
|------------------------|-------------------------------|

| | |
|----------------------------|---------------|
| Maximum Color Depth | 32 bits/pixel |
|----------------------------|---------------|

| | |
|-----------------------------------|---|
| Graphics/Video API Support | <u>3rd Generation Core processors:</u> |
|-----------------------------------|---|

- The Processor Graphics contains a refresh of the seventh generation graphics core enabling substantial gains in performance and lower power consumption. Up to 16 EU support.
- Next Generation Intel Clear Video Technology HD Support is a collection of video playback and enhancement features that improve the end user's viewing experience
 - Encode/transcode HD content
 - Playback of high definition content including Blu-ray Disc
 - Superior image quality with sharper, more colorful images
 - Playback of Blu-ray disc 3D content using HDMI (V.1.4 with 3D)
- DirectX Video Acceleration (DXVA) support for accelerating video processing
 - Full AVC/VC1/MPEG2 HW Decode
- Advanced Scheduler 2.0, 1.0, XPDM support
- Windows 7, Windows XP, OSX, Linux OS Support
- DirectX 11, DirectX 10.1, DirectX 10, DirectX 9 support
- OpenGL 3.3 support

2nd Generation Core processors:

- The Processor Graphics contains a refresh of the sixth generation graphics core enabling substantial gains in performance and lower power consumption.
- Next Generation Intel Clear Video Technology HD support is a collection of video playback and enhancement features that improve the end user's viewing experience.
 - Encode/transcode HD content
 - Playback of high definition content including Blu-ray Disc
 - Superior image quality with sharper, more colorful images
 - Playback of Blu-ray disc 3D content using HDMI (V.1.4 with 3D)
- DirectX Video Acceleration (DXVA) support for accelerating video processing
 - Full AVC/VC1/MPEG2 HW Decode
- Advanced Scheduler 2.0, 1.0, XPDM support
- Windows 7, XP, Windows Vista, OSX, Linux OS Support

Technical Specifications - Graphics

- DirectX 10.1, DirectX 10, DirectX 9 support
- OpenGL 3.0 support

Supported Display Resolutions and Refresh Rates

NOTE: other resolutions may be available but are not recommended as they may not have been tested and qualified by HP

| Resolution | Digital |
|------------|---------|
| 640x480 | 60 |
| 800x600 | 60 |
| 1024x768 | 60 |
| 1280x720 | 60 |
| 1280x1024 | 60 |
| 1440x900 | 60 |
| 1600x1200 | 60 |
| 1680x1050 | 60 |
| 1920x1080 | 60-R |
| 1920x1200 | 60-R |
| 1920x1440 | N/A |
| 2048x1536 | N/A |
| 2560x1600 | 60* |

* Only supported when using a DisplayPort connection

NOTE: Other resolutions may be available but are not recommended as they may not have been tested and qualified by HP

NOTE: 60-R denotes reduced blanking timings are used on single-link DVI connections and may be used with other digital connections

AMD Radeon HD 7650A Graphics Card

| | |
|-------------------------|--|
| Form Factor | MXM 3.0 |
| Graphics Controller | AMD Radeon HD 7650A |
| Core Clock | 600MHz |
| Memory Clock | 800MHz |
| Memory | 2GB, DDR3, 128-bit wide |
| Bus Type | MXM |
| Max. Power | 35W |
| Power Source Support | 12V and 19V |
| 3D API Support | DX11, SMS |
| HDCP Support | Yes |
| Display Max. Resolution | Digital 2560 x 1600 Analog 2048 x 1536 |
| Supported Graphics APIs | DX11, OpenGL, full 1080p BD (H264) playback in hardware, DisplayPort 1.2 support |

Display Resolutions Supported

NOTE: other resolutions may be available but are not recommended as they may not have been tested and qualified by HP

| Resolution |
|-------------|
| 800 x 600 |
| 1024 x 768 |
| 1280 x 720 |
| 1280 x 768 |
| 1280 x 1024 |

Technical Specifications - Graphics

- 1360 x 768
- 1440 x 900
- 1600 x 900
- 1680 x 1050
- 1920 x 1080

NVIDIA GeForce GT 630M

| | |
|-------------------------|---------------------|
| Bus Type | MXM 3.0A |
| Graphics Chip | GT630M |
| Engine Clock | 675MHz |
| Memory Data Rate | 900MHz |
| Memory Size (width) | 2GB (128 bit), DDR3 |
| 3D API Support | Yes |
| HDCP support | Yes |
| Max. Power | 35-37W |
| Power Source Support | 12V and 19V |
| Display Max. Resolution | 1920 x 1080 |

Display Resolutions Supported

NOTE: other resolutions may be available but are not recommended as they may not have been tested and qualified by HP

Resolution

- 800 x 600
- 1024 x 768
- 1280 x 720
- 1280 x 768
- 1280 x 1024
- 1360 x 768
- 1440 x 900
- 1600 x 900
- 1680 x 1050
- 1920 x 1080

Technical Specifications – Hard Disk and Solid State Storage

Introduction:

HP Serial Advanced Technology Attachment (SATA) Hard Drives maximize the performance of HP Business PCs by providing the technologies to meet your increasing storage demands with high-capacity drives offering superior reliability and performance.

SATA provides faster data transfer speeds, better system cooling airflow, more bandwidth, more headroom for speed increases in future generations and better data integrity. A next-generation technology, the SATA interface connects hard drives to the PC platform enabling easy aggregation of multiple hard drives into a single PC. This offers you the additional benefits of dedicated bandwidth, the ability to more easily identify device failures and scalability. The HP Compaq 6300 Pro Series supports the latest SATA 6.0Gb/s specification.

HP Drive Lock

HP Serial ATA Hard Drives offer enhanced security via a new Drive Lock. When enabled, this ATA security feature set prevents software access to user data on the drive until one or two user-defined passwords are provided.

SMART IV Technology

Self Monitoring Analysis and Reporting Technology (SMART) hard drive technology allows hard drives to monitor their own health and to raise flags if imminent failures are predicted. If the drive determines that a failure is imminent, the SMART hard drive technology enables the intelligent manageability or management software to generate a fault alert. While the current versions of SMART hard drives do a good job monitoring the data on the hard drive media, the ever increasing emphasis on reliability and quality has promoted HP to implement SMART IV technology which constantly checks that the data flow from host interface to media and media to host interface is not compromised. This is accomplished by inserting a 2 byte parity code into every 512 byte block in the data path of the hard drive's Cache RAM. This unique parity checking performed by HP's SMART IV technology hard drives, allows for more complete error detection coverage encompassing the entire data path between the host and the hard drive.

Smart IV is also known as IOEDC: I/O Error Detection Code.

Native Command Queuing

NCQ or Native Command Queuing is a SATA protocol extension that allows the hard drive to have several write or read commands outstanding at the same time. In contrast, normal non-queued operation requires each command to be completed before the next command is issued by the host system. Queuing allows the drive to complete the commands in the order that allows for best overall throughput. It also involves an advanced method of transferring data to or from the host, called First Party Direct Memory Access (FPDMA), which allows the hard drive and the host controller to manage the data transfers for multiple outstanding commands, without involving the host processor. NCQ can contribute to better performance but the results are dependent on many factors, including the access patterns of the various applications and operating system functions that are initiating drive accesses. Enabling NCQ features in the hard drive requires AHCI support from the host system BIOS, controller, and driver. AHCI support is typically implemented in RAID configurations.

Note: GB = 1 billion bytes. Actual available capacity is less.

Technical Specifications – Hard Disk and Solid State Storage

HP 250-GB 7.2K SATA 6.0Gb/s 3.5" Hard Disk Drive

| | |
|---|----------------------------------|
| Capacity | 250,059,350,016 bytes |
| Rotational Speed | 7,200 rpm |
| Interface | Serial ATA 3.0 (6.0 Gb/s) |
| Buffer Size | 8 MB |
| Logical Blocks | 488,397,168 |
| Seek Time (typical reads, includes controller overhead, including settling) | Single Track: 1.0 ms |
| | Average: 8.5 ms |
| | Full-Stroke: 18 ms |
| Height (nominal) | 1 in (2.54 cm) |
| Width (nominal) | Media diameter: 3.5 in (8.89 cm) |
| | Physical size: 4 in (10.2 cm) |
| Operating Temperature | 41° to 131° F (5° to 55° C) |

HP 500-GB 7.2K rpm SATA 6.0Gb/s 3.5" Hard Disk Drive

| | |
|---|--------------------------------|
| Capacity | 500,107,862,016 bytes |
| Rotational Speed | 7,200 rpm |
| Interface | Serial ATA 3.0 (6.0 Gb/s) |
| Buffer Size | 16 MB |
| Logical Blocks | 976,773,168 |
| Seek Time (typical reads, includes controller overhead, including settling) | Single Track: 2.0 ms |
| | Average: 11 ms |
| | Full-Stroke: 21 ms |
| Height (nominal) | 1 in/2.54 cm |
| Width (nominal) | Media diameter: 3.5 in/8.89 cm |
| | Physical size: 4 in/10.2 cm |
| Operating Temperature | 41° to 131° F (5° to 55° C) |

Technical Specifications – Hard Disk and Solid State Storage

HP 1-TB 7.2K rpm SATA 6.0Gb/s 3.5” Hard Disk Drive

| | |
|---|---|
| Capacity | 1,000,204,886,016 bytes |
| Rotational Speed | 7,200 rpm |
| Interface | Serial ATA 3.0 (6.0 Gb/s) |
| Buffer Size | 32 MB |
| Logical Blocks | 1,953,525,168 |
| Seek Time (typical reads, includes controller overhead, including settling) | Single Track: 2.0 ms Average: 11 ms Full-Stroke: 21 ms |
| Height (nominal) | 1 in/2.54 cm |
| Width (nominal) | Media diameter: 3.5 in/8.89 cm Physical size: 4 in/10.2 cm |
| Operating Temperature | 41° to 131° F (5° to 55° C) |

HP 320-GB 7.2K SATA 6.0Gb/s 2.5" Hard Disk Drive

| | |
|---|--|
| Capacity | 320,072,933,376 bytes |
| Rotational Speed | 7,200 rpm |
| Interface | Serial ATA 2.0 (3.0 Gb/s) |
| Buffer Size | 16 MB |
| Logical Blocks | 488,397,168 |
| Seek Time (typical reads, includes controller overhead, including settling) | Single Track: 2.0 ms Average: 12 ms Full-Stroke: 22 ms |
| Height (nominal) | 0.374 in/9.5 mm |
| Width (nominal) | Media diameter: 2.5 in/63.5 mm Physical size: 2.75 in/70 mm |
| Operating Temperature | 41° to 131° F (5° to 55° C) |

Technical Specifications – Hard Disk and Solid State Storage

HP 500-GB 7.2K SATA 6.0Gb/s 2.5" Hard Disk Drive

| | |
|---|--|
| Capacity | 500,107,862,016 bytes |
| Rotational Speed | 7,200 rpm |
| Interface | Serial ATA 2.0 (3.0 Gb/s) |
| Buffer Size | 16 MB |
| Logical Blocks | 976,773,168 |
| Seek Time (typical reads, includes controller overhead, including settling) | Single Track: 2.0 ms Average: 12 ms Full-Stroke: 25 ms |
| Height (nominal) | 0.374 in/9.5 mm |
| Width (nominal) | Media diameter: 2.5 in/63.5 mm Physical size: 2.75 in/70 mm |
| Operating Temperature | 41° to 131° F (5° to 55° C) |

HP 120-GB Solid State Drive

| | |
|---|--|
| Unformatted Capacity | 120 GB |
| Architecture | Multi Level Cell (MLC) NAND Flash with wear leveling 10 channel controller |
| Interface | Serial ATA 2.0 (3.0 Gb/s) |
| Dimensions (W x H x D) | 2.74 x 0.37 x 4 in/6.98 x 0.95 x 10.2 cm |
| Weight | 0.18 lb/80 g |
| Bandwidth Performance | Sustained Sequential Read: Up to 250 MB/s |
| | Sustained Sequential Write: Up to 70 MB/s |
| | Random Read: Up to 35K IOPs |
| | Random Write: Up to 6.6K IOPs |
| Latency | Read: 65-ms |
| | Write: 85-ms |
| Power | DC power requirement: 5 VDC 5%-100 mV ripple p-p |
| | Total power consumption: 0.15W (active); 0.075W (idle) |
| Useful Drive Life | 35TB written, up to 20GB/day for 5 years |
| | Operating Temperature: 32° to 158° F (0° to 70° C) |
| | Relative Humidity: 5% to 95% |
| Environmental (all conditions, non-condensing) | Maximum Wet Bulb Temperature (operating): 84° F (29° C) |
| | Shock: 1,500 G/0.5-ms |

Technical Specifications – Hard Disk and Solid State Storage

HP 128 GB Solid State Drive

| | |
|---|---|
| Unformatted Capacity | 128 GB* |
| Architecture | Multi Level Cell (MLC) NAND |
| Interface | SATA 6 GB/sec |
| Dimensions (W x H x D) | 2.75 x 0.276 x 3.96 in (6.985 x 0.7 x 10.05 cm) |
| Weight | 0.16 lb (73 g) |
| Bandwidth Performance | Sustained Sequential Read: Up to 450 MB/s |
| | Sustained Sequential Write: Up to 260 MB/s |
| | Random Read: up to 46K IOPs |
| | Random Write: up to 56K IOPs |
| Latency | Read: 55µs (TYP) |
| | Write: 55µs (TYP) |
| Power | DC power requirement: Min 4.5 V; Max 5.5 V |
| | Total power consumption: 160 mW (Active) ; <85 mW; (Idle) |
| Useful Drive Life | 1.2 million device hours** |
| | Operating Temperature: 32° to 158° F (0° to 70° C) |
| | Relative Humidity: 5% to 95% |
| | Maximum Wet Bulb Temperature (operating): 84° F (29° C) |
| Environmental (all conditions, non-condensing) | Shock: 1,500 G/1.0 msec |
| | |
| Regulations | UL, CSA, EN 60950-2000, CISPR Pub 22 Class B, CNS 13438, AS/NZS |
| | CISPR 22:2002 Class B, Korea KCC, CE Mark |
| Option kit contents | HP 128 GB Solid State Drive, documentation, 3.5-inch bay adapter bracket, 3.5-inch bay adapter bracket screws, SATA cable |

* For solid state disk drives, GB means 1 billion bytes. 128GB is the unformatted capacity of this drive before a portion of the drive is reserved for flash management features. Actual capacity will vary by content

** The product achieves a mean time between failure (MTBF) based on population statistics not relevant to individual units.

Technical Specifications - Removable Storage

HP Slim SuperMulti DVD Writer Drive

| | | |
|--|--|--|
| Height | 12.7mm height | |
| Orientation | Either horizontal or vertical | |
| Interface type | SATA/ATAPI | |
| Disc recording capacity | Up to 8.5 GB DL or 4.7 GB standard | |
| Dimensions (W x H x D) | 5.0 x 0.5 x 5.0 in (128 x 13.6 x 129 mm) | |
| Weight (max) | 0.42 lb (190 g) | |
| Write speeds | DVD-RAM | Up to 5X |
| | DVD-R DL | Up to 4X |
| | DVD+R | Up to 8X |
| | DVD+RW | Up to 4X |
| | DVD+R DL | Up to 4X |
| | DVD-R | Up to 8X |
| | DVD-RW | Up to 6X |
| | CD-R | Up to 24X |
| | CD-RW | Up to 16X |
| | DVD-RAM | Up to 5X |
| Read speeds | DVD-RW, DVD+RW | Up to 8X |
| | DVD-R DL, DVD+R DL | Up to 6X |
| | DVD+R, DVD-R | Up to 8X |
| | DVD-ROM DL, DVD-ROM | Up to 8X |
| | CD-ROM, CD-R | Up to 24X |
| | CD-RW | Up to 24X |
| | Random | DVD: < 140 ms (typical), CD: < 125 ms (typical) |
| | Full Stroke | DVD: < 250 ms (seek), CD: < 210 ms (seek) |
| | Stop Time | < 4 seconds |
| | Cache Buffer | 2 MB (minimum) |
| Access time (typical reads, including settling) | Data Transfer Modes | ATA PIO mode 4 (16.7 MB/s); ATA Multi-word DMA mode 2 (16.7 MB/s); ATA UltraDMA Mode 3 (44.4 MB/s - default) |
| | Source | Four-pin, DC power receptacle |
| | DC Power Requirement | 5 VDC ± 5%-100 mV ripple p-p 12 VDC ± 5%-200 mV ripple p-p |

Technical Specifications - Removable Storage

| | | |
|---|----------------------------------|--|
| Power | DC Current | 5 VDC (< 1000 mA typical, 1600 mA maximum) |
| | | 12 VDC (< 600 mA typical, 1400 mA maximum) |
| | Total Drive Power (standby mode) | < 2.5 Watt |
| Audio output | Line-Out | 0.7 VRMS |
| | Signal-to-Noise Ratio | 74 dB |
| | Channel Separation | 65 dB |
| | Temperature | 41° to 122° F (5° to 50° C) |
| Environmental conditions (operating - non-condensing) | Relative Humidity | 10% to 90% |
| | Maximum Wet Bulb Temperature | 86° F (30° C) |

HP Slim DVD-ROM Drive

| | | |
|---|--|---|
| Height | 12.7mm | |
| Orientation | Either horizontal or vertical | |
| Interface type | SATA/ATAPI | |
| Dimensions (W x H x D) | 5.0 x 0.5 x 5.0 in (128 x 13.6 x 129 mm) | |
| Weight (max) | 0.42 lb (190 g) | |
| | DVD+R/-R/+RW/-RW/+R DL /-R DL | Up to 4X |
| Read speeds | DVD-ROM | Up to 8X |
| | CD-ROM, CD-R | Up to 24X |
| | CD-RW | Up to 24X |
| | Random DVD | DVD: < 140 ms (typical), CD: < 125 ms (typical) |
| Access time (typical reads, including settling) | Random CD | DVD: < 250 ms (seek), CD: < 210 ms (seek) |
| | Data Transfer Modes | ATA PIO mode 4 (16.7 MB/s); ATA Multi-word DMA mode 2 (16.7 MB/s) |
| Power | Source | Four-pin, DC power receptacle |
| | DC Power Requirement | 5 VDC ± 5%-100 mV ripple p-p |
| | DC Current | 5 VDC - <1000 mA typical, < 1600 mA maximum |
| | Total Drive Power (standby mode) | < 2.5 Watt |

Technical Specifications - Removable Storage

| | | |
|---|--|-----------------------------|
| Audio output | Line-Out | 0.7 VRMS |
| | Signal-to-Noise Ratio | 74 dB |
| | Channel Separation | 65 dB |
| Environmental (all conditions non-condensing) | Temperature | 41° to 122° F (5° to 50° C) |
| | Relative Humidity | 5% to 85% |
| | Maximum Wet Bulb Temperature (operating) | 86° F (30° C) |

Technical Specifications – Memory

System Memory Support

The HP Compaq Pro 6300 Business PC supports the 2nd and 3rd generation Intel® Core™ processor families. Based on a new PC micro-architecture, the processor is designed for a two-chip platform consisting of a processor and Platform Controller Hub (PCH). Unlike previous generations, the processor includes an integrated memory controller (IMC). The IMC supports DDR3 protocols with two independent, 64-bit wide channels each accessing one or two DIMMs.

- Two channels of non-ECC DDR3 unbuffered dual in-line memory modules (UDIMM) or DDR3 unbuffered small outline dual in-line memory modules (SO-DIMM) with a maximum of two DIMMs per channel
- Single-channel and dual-channel memory organization modes
- Data burst length of eight for all memory organization modes
- DDR3 memory data transfer rates of up to 1600 MT/s; actual supported DDR3 data transfer rate determined by the configured processor.
- 64-bit wide channels
- DDR3 system memory I/O voltage of 1.5V
- Theoretical Maximum Memory Bandwidth:
 - 10.6 GB/s in single-channel mode of 21.3 GB/s in dual-channel mode assuming DDR3 1333 MT/s
 - 12.8 GB/s in single-channel mode or 25.6 GB/s in dual-channel mode assuming DDR3 1600 MT/s
 - 32 GB maximum memory support depending upon available number of DIMM sockets

CAUTION: You must shut down the computer and disconnect the power cord before adding or removing memory modules. Regardless of the power-on state, voltage is always supplied to the memory modules as long as the computer is plugged in to an active AC outlet. Adding or removing memory modules while voltage is present may cause irreparable damage to the memory modules or system board.

Memory Configurations:

Slot 1 is black and must always be populated. Not all memory configurations possible are represented below.

NOTE: For systems configured with more than 3 GB of memory and a 32-bit operating system, all memory may not be available due to system resource requirements. Addressing memory above 4 GB requires a 64-bit operating system.

| Total Memory | Socket | |
|----------------------|-------------------|-------------------|
| | Channel A (black) | Channel B (black) |
| 2 GB | 2 GB | Unpopulated |
| 4 GB (dual channel) | 2 GB | 2 GB |
| 8 GB (dual channel) | 4 GB | 4 GB |
| 16 GB (dual channel) | 8 GB | 8 GB |

Technical Specifications - Communications

Intel 82579LM GbE Network Connection (integrated)

| | |
|-----------------------|---|
| Connector | RJ-45 |
| System Interface | Integrated on PCA |
| Controller | Intel 82579LM GbE platform LAN connect networking controller |
| Memory | 24 KB FIFO packet buffer memory |
| Data rates supported | 10/100/1000 Mbps |
| IEEE Compliance | 802.1P |
| | 802.1Q |
| | 802.2 |
| | 802.3 |
| | 802.3ab |
| | 802.3az |
| | 802.3u |
| | |
| | |
| Bus architecture | PCI Express and SMBus |
| Data transfer mode | PCIe-based interface for active state operation (S0 state) and SMBus for host and management traffic (Sx low power state) |
| Power requirement | Requires 3.3V and 1.05V or just 3.3V with integrated regulators Power consumption 0.697 Watts |
| Boot ROM support | Yes |
| Network transfer mode | Full-duplex Half-duplex (not supported for the 1000BASE-T transceiver) |
| Network transfer rate | 10BASE-T (half-duplex) 10 Mbps |
| | 10BASE-T (full-duplex) 20 Mbps |
| | 100BASE-TX (half-duplex) 100 Mbps |
| | 100BASE-TX (full-duplex) 200 Mbps |
| | 1000BASE-T (full-duplex) 2000 Mbps |
| Environmental | Operating Temperature: 0° to 85° C |
| | Operating Humidity: 60% RH |
| Management | WOL, auto MDI crossover, PXE, Multi-port teaming, RSS, Advanced cable diagnostic. |
| Alerting | ASF 2.0 support; AMT 7.0 support |

Intel Centrino Advance-N 6205 Wireless Network Interface Connection

| | |
|------------------------|--|
| Wireless LAN Standards | IEEE 802.11a/b/g/n IEEE 802.11 e, 802.11i, 802.11d, 802.11d, 802.11h |
| Interoperability | Wi-Fi certified (802.11 a/b/g/n WMM, WPA, WPA2 and WPS) |
| | Tested with wireless access points from several major manufacturers |
| | OS compatible with Microsoft Windows, Win7 and XP |
| | Cisco Compatible Extensions Program compliant (802.11a/b/g only) with Microsoft Windows XP and Windows 7 |
| Frequency Band | 2.4 GHz and 5 GHz |
| Antenna Structure | 2 transmit; 2 receive (2x2) |

Technical Specifications - Communications

| | | |
|---|---|---|
| Data Rates | 802.11b: 1, 2, 5.5, 11 Mbps 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n: 66 possible data rates, ranging from 6 Mbps to 300 Mbps, depending on the combination of Bandwidth, Modulation Coding Scheme, and Guard Interval used, as defined in IEEE 802.11n specification | |
| Modulation | Direct Sequence Spread Spectrum DBPSK, DQPSK, CCK, OFDM, BPSK, QPSK, 16-QAM, 64-QAM | |
| Security | Supports 64- and 128-bit WEP, WPA, WPA2, hardware-accelerated AES (support for key sizes of 128bits), TKIP, 802.1x authentication types EAP-TLS, EAP-TTLS, PEAP, MSCHAP, PEAP-MSCHAPv2, LEAP, EAP-FAST, EAP-SIM, EAP-AKA PAP, CHAP, TLS, GTC Support for Cisco Security Features (proven compatibility with Cisco Aironet infrastructure products through the Cisco Compatible Extensions Program Version 4) with Microsoft Windows XP only. | |
| Sub-channels | Multinational support with frequency bands and channels compliant to local regulations. | |
| Media Access Protocol | CSMA/CA (Collision Avoidance) with ACK | |
| Network Architecture Models | Ad-hoc (Peer to Peer) Infrastructure (Access Point Required) Intel® My Wifi Technology (iPAN) | |
| Roaming | Provide seamless roaming between like access points (same frequency band) | |
| Output Power (for CCK) | 15 dBm | |
| Output Power (for OFDM; power varies by data rate) | 15 dBm | |
| Power Consumption | Transmit: 2.3 Watts (average, with one spatial streams) Receive: 1.9 Watts (average with two receive chains) Idle mode: 30mW – 40mW (average) Radio off: 20 mW (max) | |
| Power Management | ACPI compliant power management 802.11 compliant power saving mode | |
| Antenna Connections | 3 U.FL type connectors, 50 ohm nominal impedance | |
| Range | 802.11 a - Typical (@6 Mbps) 802.11 b - Typical (@1 Mbps) 802.11 g - Typical (@1 Mbps) | 600 feet - Outdoor Open Area 150 feet - Indoor, Office environment 1200 feet - Outdoor Open Area 300 feet - Indoor, Office environment 1200 feet - Outdoor Open Area 300 feet - Indoor, Office environment |
| Form Factor | MiniPCI-Express | |
| Weight | 0.013 lb (4.0 g) | |
| Dimensions | 1.1 x 1.2 in (26.8 x 30.0 mm) | |
| Operating Voltage | 3.3V +/- 9%, 1.5V +/- 5% | |
| Temperature | Operating: Non-operating: | 32° to 176° F (0° to 80° C) -40° to 176° F (-40° to 80° C) |
| Humidity | Operating: Non-operating: | 10% to 90% (non-condensing) 5% to 90% (non-condensing) |
| | Microsoft Windows XP | Microsoft Windows Win 7 |

Technical Specifications - Communications

Configuration Utility

- Microsoft Windows XP Wireless Network Connection Manager
- Intel PROSet for Microsoft Windows XP (required for Cisco Compatible Extensions support)
- Intel IHV extensions for Win7 available to support Cisco Compatible Extensions

HP 802.11b/g/n Wireless PCIe Minicard

| | |
|------------------------------|--|
| Dimensions (L x H) | 1.18 x 1.06 in (30 x 26.8 mm) |
| Controller | Ralink RT5392 |
| System interface | PCI Express x1 |
| Network standard | 802.11 b/g/n |
| Frequency band | 2.400 - 2.4835 GHz |
| Operating temperature | 14° to 140°F, operating (-10° to 60°C, operating) |
| Storage temperature | -40° to 176°F, non-operating (-40° to 80°C, non-operating) |
| Operating voltage | 3.3V +/- .3V 1.2V +/- .06V |

Platform/WLAN Mode

Power Consumption

Power Consumption

| | |
|---|----------------------------------|
| Not configured (PC on and NIC is powered. Adaptor not configured.) | 160 mW |
| Disabled (PC on and NIC is powered. Adaptor is configured but disabled) | 86 mW |
| Tx (Average power consumption measured while adaptor is transmitting a packet.) | HT20 - 1670 mW HT40 - 1560 mW |
| Rx (Average power consumption measured while adaptor is receiving a packet.) | HT20 - 820 mW HT40 - 990 mW |
| Idle associated (power save) | 125 mW |
| Idle non-associated | 40 mW |
| RF kill (RF diable) | 29 mW |
| Platform in S3 or S4 | 39 mW |
| 802.11 g/n modes high data rate (54Mbps, MCS7,MCS15) | +14 dBm +/- 1.5 dB maximum |
| 802.11 g/n modes low data rate (MCS0) | +17 dBm +/- 1.5 dB maximum |
| 802.11 b modes | +17 dBm +/- 1.5 dB maximum |

Output Power (approximate)

Security

IEEE 802.11i 64-/128-bit WEP encryption
WPA, WPA-PSK and TKIP, and WPA2 (with AES-CCM support)
802.1x authentication
IEEE 802.11i WPA Security
64-/128-Bit WEP Key Privacy
IEEE 802.11i
Cisco CCX V1.0, V2.0, V3.0, V.4.0 and CCX5.0 certified

Antenna

Nominal antenna port impedance specification is 50 ohm

Technical Specifications - Communications

HP 802.11a/b/g/n Wireless Minicard with Bluetooth Combo

| | |
|-----------------------|---|
| Dimensions (L x H) | 1.18 x 1.06 in (30 x 26.8 mm) |
| Controller | Broadcom BCM43228 + BCM20702 |
| System interface | PCI Express x1 |
| Network standard | 802.11 b/g/n |
| Frequency band | Bluetooth: 2.402 - 2.480 GHz Wi-Fi: 802.11a - 5.15-5.85 GHz; 802.11bg 2.412-2.4835 GHz |
| Operating temperature | 32° to 131°F, operating (0° to 55°C, operating) |
| Storage temperature | -40° to 176°F, non-operating (-40° to 80°C, non-operating) |
| Humidity | 5-90% operating 5-95% non-operating |
| Operating voltage | 3.3 V ±9% I/O supply voltage |

| | Platform/WLAN Mode | Power Consumption |
|-------------------------------|--|--|
| Power Consumption | Wi-Fi | |
| | Tx Mode | 515 mA |
| | Rx Mode | 425 mA |
| | Bluetooth | |
| | Tx Mode | 40 mA |
| | Rx Mode | 38 mA |
| | | Wi-Fi + Bluetooth - 165 mA |
| | Standby Mode | Wi-Fi only - 165 mA Bluetooth only - 0.5 mA |
| | Radio Off | 77 mA |
| | 802.11 a | 15.5 dBm@6Mbps; 15.5 dBm@54Mbps |
| | 802.11 b | 18.5 dBm@11Mbps |
| | 802.11 g | 16.5 dBm@6Mbps; 16.5 dBm@54Mbps |
| Output Power (approximate) | 802.11 n/2.4G | 20MHz: 18 dBm@MCS0; 18 dBm@MCS15 40MHz: 17 dBm@MCS0; 17 dBm@MCS15 |
| | 802.11 n/5G | 20MHz: 16 dBm@MCS0; 16 dBm@MCS15 40MHz: 16 dBm@MCS0; 16 dBm@MCS15 |
| | IEEE 802.11i 64-/128-bit WEP encryption | |
| | WPS, WPA, WPA2, WEP 64bit & 128bit, IEEE 802.11x, IEEE 802.11i | |
| Security | | |
| Antenna | Dual antenna connectors | |

Technical Specifications - Audio

IDT 92HD91Audio

| | |
|----------------------------|--|
| Type | Integrated |
| HD Stereo Codec | IDT92HD91 4-channel codec |
| Ports | Line-In/Microphone input ports are 50K (nominal) at the pin Line-Out intended to drive an external 10K load (nominal) and an on board shunt resistor of 20-47K (nominal) Headphone-Out designed to drive 32 ohm (nominal) headphones or a 10K (nominal) load All ports are 3.5 mm |
| Internal Speaker Amplifier | 2W/channel Class-D stereo BTL speaker amplifier@ 4 ohms and 4.75V |
| Sampling | The 92HD91 audio CODEC provides stereo 24- bit, full duplex resolution supporting sample rates up to 192kHz by the DAC and ADC. SPDIF outputs support sample rates of 192kHz, 96kHz, 88.2kHz, 48kHz, and 44.1kHz. Additional sample rates are supported by the driver software. |
| Wavetable Syntheses | Yes – Uses OS soft wavetable |
| Analog Audio | Yes |
| # of Channels on Line-Out | 4 Channels (2 stereo DACs and 2 stereo ADCs) with 24-bit resolution |
| Internal Speaker | Yes |
| External Speaker Jack | Yes |

SRS Premium Sound Technology

| | |
|----------------------------|---|
| Introduction | <p>SRS Premium Sound™ is a state-of-the-art solution suite which optimizes the audio experience for all business applications including VoIP, computer based training, business presentations and digital content creation for any speaker configuration (notebook/desktop speakers or headphones). SRS Premium Sound delivers natural and immersive surround sound complete with deep, enveloping bass and crystal clear dialog which allows users to clearly hear audio and voice in communications or presentations and ensures that digital content can be experienced with uncompromised quality.</p> |
| SRS Premium Sound Features | <ul style="list-style-type: none">• Premium audio experience for all applications including VoIP, Video Conferencing, Webcasts, Multimedia Presentations and Digital Content Creation• Natural and Immersive sound from two speakers or headphones• Custom-tuned solutions to provide superior natural sound from desktop speakers and headphones• Crystal clear dialog• Deep, rich bass• Intuitive user interface with presets for ease of use |
| SRS Premium Sound Benefits | <ul style="list-style-type: none">• Turn your desktop into a multimedia powerhouse!• Bring your business communication to life with natural sounding voice and clear dialog• Increase productivity by making computer based training, webcasts and VoIP available anytime and anywhere with crystal clear audio• Make presentations shine with rich, expansive sound without the need for external speakers• Take digital content creation to a new level with deep bass, enhanced fidelity and immersive surround sound which ensures that your content is heard with uncompromised quality and detail |

Technical Specifications – Keyboards and Pointing Devices

HP USB Keyboard

| | | |
|--------------------------|---|---|
| | Keys | 104, 105, 106, 107, 109 layout (depending upon country) |
| Physical characteristics | Dimensions (L x W x H) | 18.12 x 6.47 x 0.96 in (46.03 x 16.43 x 2.44 cm) |
| | Weight | 2 lb (0.9 kg) |
| | Operating voltage | + 5VDC \pm 5% |
| | Power consumption | 50-mA maximum (with three LEDs ON) |
| Electrical | System interface | USB Type A plug connector |
| | ESD | CE level 4, 15-kV air discharge |
| | EMI - RFI | Conforms to FCC rules for a Class B computing device |
| | Microsoft® PC 99 - 2001 | Functionally compliant |
| Mechanical | Keycaps | Low-profile design |
| | Switch actuation | 55-g nominal peak force with tactile feedback |
| | Switch life | 20 million keystrokes (using Hasco modified tester) |
| | Switch type | Contamination-resistant switch membrane |
| | Key-leveling mechanisms | For all double-wide and greater-length keys |
| | Cable length | 6 ft (1.8 m) |
| | Microsoft PC 99 - 2001 | Mechanically compliant |
| | Acoustics | 43-dBA maximum sound pressure level |
| | Operating temperature | 50° to 122° F (10° to 50° C) |
| | Non-operating temperature | -22° to 140° F (-30° to 60° C) |
| | Operating humidity | 10% to 90% (non-condensing at ambient) |
| | Non-operating humidity | 20% to 80% (non-condensing at ambient) |
| Environmental | Operating shock | 40 g, six surfaces |
| | Non-operating shock | 80 g, six surfaces |
| | Operating vibration | 2-g peak acceleration |
| | Non-operating vibration | 4-g peak acceleration |
| | Drop (out of box) | 26 in (66 cm) on carpet, six-drop sequence |
| | Drop (in box) | 42 in (107 cm) on concrete, 16-drop sequence |
| Approvals | UL, CSA, FCC, CE Mark, TUV, TUV GS, VCCI, BSMI, C-Tick, MIC | |
| Ergonomic compliance | ANSI HFS 100, ISO 9241-4, and TUVGS | |

Technical Specifications – Keyboards and Pointing Devices

| | | |
|---------------------|---------------|--------------------------|
| Kit contents | Keyboard | Installation Guide |
| | Warranty Card | Safety and Comfort Guide |

HP PS/2 Keyboard

| | | |
|---------------------------------|--|---|
| Physical Characteristics | Keys | 104, 105, 106, 107, 109 layout (depending upon country) |
| | Dimensions (L x W x H) | 18.12 x 6.47 x 0.96 in (46.03 x 16.43 x 2.44 cm) |
| | Weight | 2 lb (0.9 kg) minimum |
| | Operating voltage | + 5VDC \pm 5% |
| Electrical | Power consumption | 50-mA maximum (with three LEDs ON) |
| | System interface | PS/2 6-pin mini din connector |
| | ESD | CE level 4, 15-kV air discharge |
| | EMI - RFI | Conforms to FCC rules for a Class B computing device |
| Mechanical | Microsoft PC 99 - 2001 | Functionally compliant |
| | Keycaps | Low-profile design |
| | Switch actuation | 55-g nominal peak force with tactile feedback |
| | Switch life | 20 million keystrokes (using Hasco modified tester) |
| | Switch type | Contamination-resistant switch membrane |
| | Key-leveling mechanisms | For all double-wide and greater-length keys |
| | Cable length | 6 ft (1.8 m) |
| | Microsoft PC 99 - 2001 | Mechanically compliant |
| | Acoustics | 43-dBA maximum sound pressure level |
| | Operating temperature | 50° to 122° F (10° to 50° C) |
| | Non-operating temperature | -22° to 140° F (-30° to 60° C) |
| | Operating humidity | 10% to 90% (non-condensing at ambient) |
| Environmental | Non-operating humidity | 20% to 80% (non-condensing at ambient) |
| | Operating shock | 40 g, six surfaces |
| | Non-operating shock | 80 g, six surfaces |
| | Operating vibration | 2-g peak acceleration |
| | Non-operating vibration | 4-g peak acceleration |
| | Drop (out of box) | 26 in (66 cm) on carpet, six-drop sequence |
| Approvals | Drop (in box) | 30 in (107 cm) on concrete, 16-drop sequence |
| | UL, CSA, FCC, CE Mark, TUV, TUV GS, VCCI, BSMI, C-Tick, KC | |

Technical Specifications – Keyboards and Pointing Devices

Ergonomic compliance ANSI HFS 100, ISO 9241-4, and TUVGS

HP USB Smart Card (CCID) Keyboard

Introduction:

Boost your security, simplify access procedures and reduce the costs associated with managing networks by preventing unauthorized access to your computers and networks using smartcard technology with the HP Smart Card (CCID) Keyboard.

The USB Smart Card (CCID) Keyboard is a full-sized keyboard that takes advantage of digital signatures and certificates to secure the environment for transactions performed on both public and private networks. The USB Smart Card (CCID) Keyboard works with all smart cards that comply with ISO standard 7816.

Smart cards are easy-to-use credit card-sized devices which require multiple forms of information to be validated before you gain access to your accounts or resources. Used worldwide, smart cards strengthen access to a network or other resource using dual-factor authentication. Implementing a two-factor authentication (or multi-factor authentication) process reduces the risk of unauthorized access by verifying and validating your identity in one of the following ways:

- Something you know – a combination of username and password or PIN
- Something you have – a smart card or security token.

Something you have (smart card) plus something you know (PIN), improves user-access security within corporate network environments. Smart cards are used in government agencies, healthcare companies and the finance industry.

HP ProtectTools Smart Card Manager provides authentication software for the smart card. The Smart Card Reader module works with the HP ProtectTools Security Manager and enables the user to setup, use, and manage the smart card. This allows strengthened security with HP patented technology.

Key Benefits:

- Protects against unauthorized access with smart card technology
- Delivers even greater security when combined with a HP ProtectTools smart card and the HP ProtectTools Security Software
- Combination of username and password or pin with a smart card or security token
- Secures online transactions using digital signatures and certificates
- Conforms to industry standards for ease of setup and use
- Delivers long product life and quiet operation with high-impact materials and lubricated keys
- Spill drain feature

Physical Characteristics

| | |
|---------------------------|--|
| Keys | 104, 105, 106, 107, 109 layout (depending upon country) |
| Form factor | USB basic smart card keyboard |
| Colors | Carbonite/Silver |
| Dimensions (H x W x D) | 18.2 x 6.3 x 1.3 in (46.3 x 16.1 x 3.3 cm) |
| Weight | 2 lb (0.9 kg) minimum |
| Operating voltage | + 5VDC ± 5% |
| Power consumption | 100-mA maximum (with four LEDs ON) |

Electrical

| | |
|------------------------|--|
| System interface | USB Type A plug connector |
| ESD | CE level 4, 15-kV air discharge |
| EMI - RFI | Conforms to FCC rules for a Class B computing device |
| Microsoft PC 99 - 2001 | Functionally compliant |
| Languages | 30+ available |

Technical Specifications – Keyboards and Pointing Devices

| | | | |
|-----------------------------|---|--|--------------------------------|
| Mechanical | Keycaps | Standard design | |
| | Switch actuation | 55 g nominal peak force with tactile feedback | |
| | Switch life | 20 million keystrokes (using Hasco modified tester) | |
| | Switch type | Contamination-resistant membrane | |
| | Key-leveling mechanisms | For all double-wide and greater-length keys | |
| | Cable length | 6 ft (1.8 m) | |
| | Microsoft PC 99 - 2001 | Mechanically compliant | |
| | Acoustics | 43-dBA maximum sound pressure level | |
| | Operating temperature | 50° to 122° F (10° to 50° C) | |
| | Non-operating temperature | -22° to 140° F (-30° to 60° C) | |
| Environmental | Operating humidity | 10% to 90% (non-condensing at ambient) | |
| | Non-operating humidity | 20% to 80% (non-condensing at ambient) | |
| | Operating shock | 40 g, six surfaces | |
| | Non-operating shock | 80 g, six surfaces | |
| | Operating vibration | 2-g peak acceleration | |
| | Non-operating vibration | 4-g peak acceleration | |
| | Drop (out of box) | 26 in (66 cm) on carpet, six-drop sequence | |
| | Drop (in box) | 42 in (107 cm) on concrete, 16-drop sequence | |
| | Support | All ISO 7816 smart cards | |
| | Interface | Reads from and writes to all ISO7816-1, 2, 3, 4 memory and microprocessor smart cards (T=0, T=1) | |
| SmartCard Function | Chipset | SCM STCIII | |
| | Standard APIs supported | PC/SC, EMV2000, CT-API | |
| | Power | USB Port | |
| | | Short circuit detection (protects smart card and reader) | |
| | | Power supply compliant with ISO7816 and EMV (5V, 60 mA) | |
| | | Supports 3-V and 5-V cards | |
| | Power consumption | 100-mA maximum draw | |
| | Communication | From card | 9600 bps to 330,000 bps |
| | | From computer | 12 Mbps (USB transfer speed) |
| | Landing mechanism | Contact device | Friction contact |
| Approvals | | Card insertions rating | Up to 100,000 insertion cycles |
| | Interface modes | CCID protocol | |
| | Reader performance interface | USB connection | |
| | Electro-magnetic standards | Europe | 2004/108/EC |
| | | USA | USAFCC part 15 |
| | CE-Mark, UL, CSA, FCC, CE Mark, TUV, TUV GS, VCCI, BSMI, C-Tick, MIC, EMV2000, USB-IF | | |
| | ISO 9241-4, TUVGS | | |
| | Keyboard, I/O Security and Documentation CD, warranty card | | |
| | | | |
| | | | |
| Ergonomic Compliance | | | |
| Kit Contents | | | |

Technical Specifications – Keyboards and Pointing Devices

HP USB PS/2 Washable Keyboard

| | | |
|---------------------------------|--|---|
| Physical Characteristics | Keys | 104 (US) Layout, 105 (EU) layout - depending upon country |
| | Dimensions (L x W x H) | 17.67x 6.62 x 1.38 in (449 x 168 x 35 mm) |
| | Weight | 1.7 lb (0.77 kg) minimum |
| | Operating voltage | + 5VDC \pm 5% |
| Electrical | Power consumption | 50-mA maximum (with three LEDs ON) |
| | System interface | USB Type A plug connector |
| | ESD | CE level 4, 15-kV air discharge |
| | EMI - RFI | Conforms to FCC rules for a Class B computing device |
| Mechanical | Microsoft® PC 99 - 2001 | Functionally compliant |
| | Keycaps | Stepped -profile design |
| | Switch actuation | 55-g nominal peak force with tactile feedback |
| | Switch life | 20 million keystrokes |
| | Switch type | Contamination-resistant switch membrane |
| | Key-leveling mechanisms | For all double-wide and greater-length keys |
| | Cable length | 7 ft (2.2 m) |
| | Microsoft PC 99 - 2001 | Mechanically compliant |
| | Acoustics | 43-dBA maximum sound pressure level |
| | Operating temperature | 50° to 122° F (10° to 50° C) |
| Environmental | Non-operating temperature | -22° to 140° F (-30° to 60° C) |
| | Operating humidity | 10% to 95% (non-condensing at ambient) |
| | Non-operating humidity | 0% to 95% (non-condensing at ambient) |
| | Operating shock | 40 g, six surfaces |
| | Non-operating shock | 80 g, six surfaces |
| | Operating vibration | 2-g peak acceleration |
| | Non-operating vibration | 4-g peak acceleration |
| | Drop (out of box) | 26 in (66 cm) on carpet, six-drop sequence |
| Operating system support | Drop (in box) | 42 in (107 cm) on concrete, 16-drop sequence |
| | Windows® 7, Windows Vista, Windows XP Professional | |
| Approvals | UL, cUL, FCC, CE, TUV GS, VCCI, BSMI, C-Tick, KCC, USB-IF, WHQL, EN/IEC 60601-1, IP66/NEMA4X | |
| Ergonomic compliance | ANSI HFS 100, ISO 9241-4, and TUVGS | |

Technical Specifications – Keyboards and Pointing Devices

HP Wireless Keyboard and Mouse

| | | |
|----------------------------|--|---|
| Keyboard | Dimensions (H x L x W) | 1.09 x 18.1 x 6.47 in (27.87 x 460.3 x 164.3 mm) |
| | Weight – Without Two AA Alkaline Batteries | 1.94 lb (880 g) |
| Mouse | Dimensions (H x L x W) | 1.46 x 4.53 x 2.47 in (37 x 115 x 62.9 mm) |
| | Weight – Without Two AA Alkaline Batteries | 0.15 lb (67 g) |
| Receiver | Dimensions (H x L x W) | 0.33x 1.79 x 0.72 in (8.4 x 45.5 x 18.4 mm) |
| | Weight | 0.21 oz (5.9 g) |
| | Cable Length – Minimum | 6 ft (1.8 m) |
| | Range | 32.8 ft (10 m) |
| System Requirements | Windows 7 Home Basic*, Windows 7 Home Premium*, Windows 7 Professional Edition 32*, Windows 7 Professional Edition 64*, Windows 7 Ultimate Edition 32*, Windows 7 Ultimate Edition 64* Windows Vista or Windows XP Available USB port for the receiver CD-ROM Drive *This system may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See http://www.microsoft.com/windows/windows-7/ for details. | |
| | Product Safety | UL; CSA /TUV (Europe only); CE Mark; CB Report |
| | Ergonomics | ANSI; ISO (Europe only); GS Mark (Germany only) |
| | EMC | FCC; CE; ACA (-tick); BSMI; KC ; VCCI |
| | CE Mark | EN 55022:2010; EN 55024; EN 301489-1; EN 61000 |
| | Design Guidelines for PCs | PC 99 - connector overmold colors; PC 2001 - full functionality |
| | Telecom | All local telecom requirements and approvals for intended markets |
| | USA | FCC Title 47 CFR, Par 15, Subpart C; other local requirements |
| | Country Support | US, Belgium, Switzerland, Spain, Denmark, Netherlands, France, Germany, Italy, Portugal, Sweden, Norway, Finland, UK, Poland, Czech Republic, Turkey, Greece, Austria, Bulgaria, Cyprus, Estonia, Hungary, Ireland, Latvia, Lithuania, Luxemburg, Malta, Romania, Slovakia, Slovenia, Vietnam, HK, Australia, NZ, Malaysia, Singapore, Indonesia, Philippines, Thailand, Canada, China, Japan, Korea, Taiwan, India, Venezuela, Ecuador, Russia, Ukraine, Israel, Croatia, United Arab Emirates, Peru, Brazil, Chile, Argentina, Mexico, South Africa, and up to 193 countries worldwide. |
| | | |

HP PS/2 Mouse

| | |
|----------------------------------|--|
| Dimensions (H x L x W) | 1.46 x 2.48 x 4.53 in (3.70 x 6.29 x 11.50 cm) |
|----------------------------------|--|

Technical Specifications – Keyboards and Pointing Devices

| | | |
|----------------------|----------------------------|--|
| Weight | 3.53 oz (100g; +10g/- 5 g) | |
| | Operating temperature | -32° to 104°F (0° to 40° C) |
| | Non-operating temperature | -4° to 140°F (-20° to 60° C) |
| | Operating humidity | 10% to 90% (non condensing at ambient) |
| | Non-operating humidity | 10% to 90% (non condensing at ambient) |
| Environmental | Operating shock | 40 g, 6 surfaces |
| | Non-operating shock | 80 g, 6 surfaces |
| | Operating vibration | 2 g peak acceleration |
| | Non-operating vibration | 4 g peak acceleration |
| | Drop (out of box) | 80 cm height onto asphalt tile over concrete or equivalent, 5-drop in 5 direction except the cable face |
| | Operating voltage | 5 VDC \pm 10% |
| Electrical | Power consumption | 100mA |
| | System consumption | PS/2 mini-din connector |
| | ESD | CE level 4, 15 kV air discharge |
| | EMI-RFI | Conforms to FCC rules for a Class B computing device |
| | Microsoft PC99 - 2001 | Functionally compliant |
| | Resolution | 800 DPI |
| | Tracking speed | 10 in/s (25.4 cm/s) maximum |
| | Acceleration | \pm 15% |
| | Switch actuation | 65 \pm 20 gf |
| | Switch life | 3,000,000 operations (using Hasco modified tester) |
| Mechanical | Switch type | Low force micro-switches |
| | Tracking mechanism life | 80 km |
| | Cable length | 6 ft (1.8 m) |
| | Microsoft PC99 - 2001 | Mechanically compliant |
| | Width | 6 mm |
| | Diameter | 22.5 \pm 0.2 mm |
| | Maximum rotation force | 50 gf-cm |
| | Switch type | Light force micro-switch |
| Scroll wheel | Switch life | 1 million operations |
| | Mechanical life | Minimum 200,000 revolutions |

Technical Specifications – Keyboards and Pointing Devices

Regulatory Approvals UL/cUL, FCC, CE Mark, TUV/GS, VCCI, KCC, BSMI, C-Tick

HP USB Mouse

| | |
|---------------------------|--|
| Dimensions (H x L x W) | 1.5 x 4.5 x 2.5 in (3.8 x 11.6 x 6.3 cm) |
| Weight | 0.22 lb (0.10 kg) |
| Cable length | 70.9 in (180 cm) |
| System requirements | Available USB port |

HP USB 1000dpi Laser Mouse

| | | |
|---------------------------|--|---|
| Dimensions (H x L x W) | 1.47 x 4.53 x 2.47 in (37.3 x 114.97 x 62.86 mm) | |
| Weight | 3.360 oz (102g) | |
| Cable length | 70.9 in (180 cm) | |
| System requirements | Available USB port | |
| Environmental | Operating Temperature | 32° to 104° F (0° to 40° C) |
| | Non-operating Temperature | -4° to 140° F (-20° to 60° C) |
| | Operating Humidity | 10% to 90% (non-condensing at ambient) |
| Mechanical | Resolution | 1000dpi |
| | Tracking Speed | 45 cm/sec |
| | Cable Length | 70.9 in (180 cm) |

HP USB PS/2 Washable Mouse

| | | |
|------------------------|---|--|
| Dimensions (H x L x W) | 1.56 x 2.44 x 4.61 in (3.95 x 6.21 x 11.7 cm) | |
| Weight | 4.44 oz (126 g) | |
| Environmental | Operating temperature | -32° to 104°F (0° to 40° C) |
| | Non-operating temperature | -4° to 140°F (-20° to 60° C) |
| | Operating humidity | 10% to 90% (non-condensing at ambient) |
| | Non-operating humidity | 10% to 90% (non condensing at ambient) |
| | Operating shock | 40 g, 6 surfaces |
| | Non-operating shock | 80 g, 6 surfaces |
| | Operating vibration | 2 g peak acceleration |
| | Non-operating vibration | 4 g peak acceleration |

Technical Specifications – Keyboards and Pointing Devices

| | | |
|-----------------------------|--------------------------|---|
| | Drop (out of box) | 80 cm height onto asphalt tile over concrete or equivalent, 5-drop in 5 direction except the cable face |
| Electrical | Operating voltage | 5 VDC \pm 10% |
| | Power consumption | 100mA |
| | System consumption | PS/2 mini-din connector |
| | ESD | CE level 4, 15 kV air discharge |
| | EMI-RFI | Conforms to FCC rules for a Class B computing device |
| Mechanical | Microsoft® PC99 – 2001 | Functionally compliant |
| | Resolution | 400 \pm 20% DPI |
| | Tracking speed | 10 in/s (25.4 cm/s) maximum |
| | Acceleration | 100 in/s/s (2.54 m/s/s) |
| | Switch actuation | 61 g nominal peak force |
| | Switch life | 3,000,000 operations (using Hasco modified tester) |
| | Switch type | Low force micro-switches |
| | Tracking mechanism life | 155 mi (250 km) at average speed of 10 in/s |
| | Cable length | 6 ft (1.8 m) |
| | Microsoft PC99 – 2001 | Mechanically compliant |
| Scroll wheel | Width | 8 mm |
| | Diameter | 1.01 in (25.6 mm) |
| | Maximum rotation speed | 48 rats/sec |
| | Switch type | Light force micro-switch |
| | Switch life | 1 million operations |
| | Mechanical life | Minimum 200,000 revolutions |
| Regulatory approvals | Compliant | UL, CSA, FCC, CE Mark, TUV, TUV GS, VCCI, BSMI, C-Tick, MIC |
| Compatibility | Operating system support | Windows 7, Windows Vista Business 64*, Windows Vista Business 32*, Windows Vista Home Basic 32*, Windows 2000, Windows XP Professional or Windows XP Home 32* (No driver is required for this device. Native support is provided by the operating system.), xpe, ce.net, Linux, XP-64 |

* Certain Windows Vista product features require advanced or additional hardware. Windows Vista Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit: <http://www.windowsvista.com/upgradeadvisor>. For Windows Vista system requirements, visit: <http://www.windowsvista.com/systemrequirements>.

Options and Accessories (sold separately)

AFTER MARKET OPTIONS:

MEMORY

| | Part Number |
|-------------------------------------|-------------|
| HP 2GB DDR3-1600 (PC3-12800) SODIMM | B4U38AA |
| HP 4GB DDR3-1600 (PC3-12800) SODIMM | B4U39AA |
| HP 8GB DDR3-1600 (PC3-12800) SODIMM | B4U40AA |

DATA STORAGE DRIVES AND ACCESSORIES

| | Part Number |
|-------------------------------------|-------------|
| 1 TB, 7200 rpm, SATA -6.0 Gb/s | QK555AA |
| 500 GB, 7200 rpm, SATA -6.0 Gb/s | QK554AA |
| 128 GB SATA Solid State Drive | QV063AA |
| HP Slim DVD-ROM Drive | VP033AA |
| HP Slim SuperMulti DVD Writer Drive | QS209AA |

INPUT DEVICES

| | Part Number |
|-----------------------------------|-------------|
| HP PS/2 Mouse | QY775AA |
| HP USB 1000dpi Laser Mouse | QY778AA |
| HP USB Mouse | QY777AA |
| HP USB PS/2 Washable Scroll Mouse | BM866AA |
| HP Mouse Pad | AT485AA |
| HP USB Smart Card (CCID) Keyboard | BV813AA |
| HP Wireless Keyboard & Mouse | QY449AA |
| HP USB PS/2 Washable Keyboard | VF097AA |
| HP USB Keyboard | QY776AA |
| HP USB Grey Keyboard | B6B64AA |

SECURITY

| | Part Number |
|---------------------|-------------|
| HP Keyed Cable Lock | BV411AA |

MISCELLANEOUS

| | Part Number |
|---------------------------------------|-------------|
| Belkin Promo 7-Outlet Surge Protector | AG290AA |
| Belkin USB to Serial Adapter | EM449AA |
| DisplayPort Cable | VN567AA |
| DisplayPort To DVI-D Adapter | FH973AA |
| DisplayPort To HDMI Adapter | BP937AA |
| DisplayPort To VGA Adapter | AS615AA |

STANDS AND MONITOR ARMS

| | Part Number |
|-----------------------------|-------------|
| AiO Height Adjustable Stand | C1N43AA |
| HP Single Monitor Arm | BT861AA |

Options and Accessories (sold separately)

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